

Yakima Valley Dairies SDWA-10-2013-0080

Residential Well Sampling

Data Usability Summary Report Sample Delivery Group SWE0197, SWE0206, and SWE0207

June 6, 2013



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Residential Well Sampling Yakima Valley Dairies SDWA-10-2013-0080

Prepared for:

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Summary

This Data Usability Summary Report summarizes the review of Sample Delivery Group numbers SWE0197, SWE0206, and SWE0207 for samples collected under the Yakima Valley Dairies Residential Well Sampling Quality Assurance Project Plan (QAPP). This assessment of data validation and usability was performed per the guidance and requirements established under Section 4 of the QAPP.

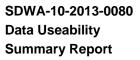
Samples in Delivery Group numbers SWE0197, SWE0206, and SWE0207 were collected from residential wells per the QAPP during the period May 29 to May 30, 2013. This review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with nitrate were reviewed for this validation. Field documentation was not included in this review.

Analytical Data Package Documentation

The table below is the evaluation of the data package completeness.

		Rep	orted	Performance Acceptable		
Items	s Reviewed	No	Yes	No	Yes	
1.	Sample receipt condition		Х		Х	
2.	Requested analyses and sample results		Х		Х	
3.	Master tracking list		Х		Х	
4.	Methods of analysis		Х		Х	
5.	Reporting Limits		Х		Х	
6.	Sample collection date		Х		Х	
7.	Laboratory sample received date		Х		Х	
8.	Sample preservation verification (as applicable)		Х		Х	
9.	Sample preparation/extraction/analysis dates		Х		Х	
10.	Fully executed chain of custody form		Х		Х	
11.	Narrative summary of quality assurance (QA) or sample problems provided		Х		х	
12.	Data package completeness and compliance		Х		Х	

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Laboratory Analysis

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 300.0 (USEPA 2010). Data were reviewed in accordance with USEPA National Functional Guidelines (USEPA 2005).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines (USEPA 2005):

Concentration (C) Qualifiers

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- B The compound has been found in the sample as well as its associated blank. Its
 presence in the sample may be suspect.

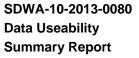
Quantitation (Q) Qualifiers

- E The compound was quantitated above the calibration range.
- D Concentration is based on a diluted sample analysis.

Validation Qualifiers

- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- UJ The compound was not detected above the reported sample quantitation limit.
 However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- JN The analysis indicates the presence of a compound for which there is presumptive
 evidence to make a tentative identification. The associated numerical value is an
 estimated concentration only.
- UB The compound is considered non-detect at the listed value due to associated blank contamination.

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- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- R The sample results are rejected as unusable. The compound may or may not be present in the sample.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error.

Nitrate

Holding Times

The specified holding time for nitrate (as nitrogen) analyzed by Method SW-846 300 is presented in the following table.

Method	Matrix	Holding Time	Preservation
Nitrate as Nitrogen SW-846 300.0	Water	48 hours	Cool to 4±2 °C

The samples were prepared and analyzed within the specified holding time criteria.

Blank Contamination

QA blanks (i.e., laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

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Nitrate associated with the QA blanks exhibited a concentration less than the MDL. No data were qualified based on blank contamination.

Matrix Spike/Matrix Spike Duplicate Samples

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the (optional) MS/MSD analysis must exhibit recoveries within the method-specified acceptance limits of 80 to 120 percent. The relative percent difference (RPD) between the MS and MSD results should be within the laboratory-established acceptance limits of zero to 12.1 percent.

The MS/MSD results were compliant and no data were qualified based on MS/MSD recovery.

Laboratory Control Sample/Ongoing Precision and Recovery Analysis

The LCS/OPR analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/OPR analysis must exhibit recoveries within the method-specified acceptance limits.

All compounds associated with the LCS/OPR analyses exhibited recoveries within the control limits. The LCS/OPR results were compliant and no data were qualified based on LCS/OPR recovery.

Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method.

Field duplicate samples were not collected as part of this dataset.

System Performance and Overall Assessment

Overall system performance was acceptable. The reporting limits met the data quality objects. The overall data quality is within the guidelines specified in the method. No data were qualified based on the findings of the data validation.

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Data Validation Checklist for Nitrate

	Rep	orted		rmance ptable	Not Required	
Nitrate (as Nitrogen): SW-846 300.0	No	Yes	No	Yes	Required	
GC/MS						
Tier II Validation						
Holding times		Х		Х		
Reporting limits (units)		Х		Х		
Blanks						
A. Method blanks		Х		Х		
B. Equipment/Field blanks					Х	
Laboratory Control Sample (LCS) Accuracy %R		Х		Х		
LCS Duplicate (LCSD) %R					Х	
LCS/LCSD Precision (RPD)					Х	
MS %R		Х		Х		
MSD %R		Х		Х		
MS/MSD RPD		Х		Х		
Field/Laboratory Duplicate Sample RPD					Х	
Dilution Factor		Х		Х		
Moisture Content					Х	

Note: %R Percent recovery

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Appendix A

TestAmerica Labs Analytical Report SWE0197



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Spokane 11922 East 1st. Avenue Spokane, WA 99206 Tel: (509)924-9200

TestAmerica Job ID: SWE0197

Client Project/Site: [none]

Client Project Description: Yakima Dairies

For:

ARCADIS U.S., Inc. - Liberty Lake 695 N. Legacy Ridge Drive, Suite 200 Liberty Lake, WA 99019

Attn: Tom Mullen

tanduseder

Authorized for release by: 6/4/2013 1:50:17 PM

Randee Decker, Project Manager Randee.Decker@testamericainc.com

·····LINKS ······

Review your project results through
Total Access

Have a Question?



Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: ARCADIS U.S., Inc. - Liberty Lake Project/Site: [none]

TestAmerica Job ID: SWE0197

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Sample Summary

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SWE0197-01	RW-1030	Water	05/28/13 14:35	05/30/13 08:00
SWE0197-02	RW-3030	Water	05/28/13 14:20	05/30/13 08:00
SWE0197-03	RW-1044	Water	05/28/13 15:25	05/30/13 08:00
SWE0197-04	RW-1045	Water	05/28/13 15:47	05/30/13 08:00
SWE0197-05	RW-1125	Water	05/28/13 16:05	05/30/13 08:00
SWE0197-06	RW-1046	Water	05/28/13 16:20	05/30/13 08:00
SWE0197-07	RW-1047	Water	05/28/13 16:40	05/30/13 08:00
SWE0197-08	RW-1049	Water	05/28/13 17:00	05/30/13 08:00
SWE0197-09	RW-1051	Water	05/28/13 17:25	05/30/13 08:00
SWE0197-10	RW-1054	Water	05/28/13 17:40	05/30/13 08:00
SWE0197-11	RW-1085	Water	05/29/13 08:15	05/30/13 08:00
SWE0197-12	RW-3085	Water	05/29/13 08:00	05/30/13 08:00
SWE0197-13	RW-1093	Water	05/29/13 08:57	05/30/13 08:00
SWE0197-14	RW-2093	Water	05/29/13 09:00	05/30/13 08:00
SWE0197-15	RW-1094	Water	05/29/13 09:18	05/30/13 08:00
SWE0197-16	RW-1095	Water	05/29/13 09:30	05/30/13 08:00
SWE0197-17	RW-1096	Water	05/29/13 09:45	05/30/13 08:00
SWE0197-18	RW-1158	Water	05/29/13 10:08	05/30/13 08:00
SWE0197-19	RW-1100	Water	05/29/13 10:55	05/30/13 08:00
SWE0197-20	RW-2100	Water	05/29/13 10:57	05/30/13 08:00
SWE0197-21	RW-1103	Water	05/29/13 11:10	05/30/13 08:00
SWE0197-22	RW-1099	Water	05/29/13 11:20	05/30/13 08:00
SWE0197-23	RW-1149	Water	05/29/13 11:50	05/30/13 08:00
SWE0197-24	RW-1107	Water	05/29/13 12:25	05/30/13 08:00
SWE0197-25	RW-2107	Water	05/29/13 12:30	05/30/13 08:00

Definitions/Glossary

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Glossary

RPD

TEF

TEQ

Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Client Sample ID: RW-1030 Lab Sample ID: SWE0197-01

Date Collected: 05/28/13 14:35 Matrix: Water

Date Received: 05/30/13 08:00

Method: EPA 300.0 - Anions by EPA Method 300.0								
İ	Analyte	Result Qualific	er RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
	Nitrate-Nitrogen	7.59	0.200	mg/l		05/30/13 08:13	05/30/13 08:39	1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Client Sample ID: RW-3030 Lab Sample ID: SWE0197-02 Date Collected: 05/28/13 14:20

Matrix: Water

Date Received: 05/30/13 08:00

Method: EPA 300.0 - Anions by EPA Method 300.0									
	Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
	Nitrate-Nitrogen	ND		0.200	mg/l		05/30/13 08:13	05/30/13 08:58	1.00

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Client Sample ID: RW-1044 Lab Sample ID: SWE0197-03 Date Collected: 05/28/13 15:25

Matrix: Water

Date Received: 05/30/13 08:00

Method: EPA 300.0 - Anions by EPA Method 300.0										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Nitrate-Nitrogen	8.19		0.200		mg/l		05/30/13 08:13	05/30/13 09:16	1.00

Client: ARCADIS U.S., Inc. - Liberty Lake

Client Sample ID: RW-1045

Project/Site: [none]

TestAmerica Job ID: SWE0197

Lab Sample ID: SWE0197-04

Matrix: Water

Date Collected: 05/28/13 15:47 Date Received: 05/30/13 08:00

Method: EPA 300.0 - Anions by EPA Method 300.0 Analyte RLMDL Unit D Prepared Analyzed Dil Fac Nitrate-Nitrogen 15.3 0.200 mg/l 05/30/13 08:13 05/30/13 09:35 1.00

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Client Sample ID: RW-1125 Lab Sample ID: SWE0197-05

Date Collected: 05/28/13 16:05 Matrix: Water

Date Received: 05/30/13 08:00

Method: EPA 300.0 - Anions by EPA Method 300.0										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Nitrate-Nitrogen	10.5		0.200		mg/l		05/30/13 08:13	05/30/13 09:54	1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Client Sample ID: RW-1046 Lab Sample ID: SWE0197-06 Date Collected: 05/28/13 16:20

Matrix: Water

Date Received: 05/30/13 08:00

Method: EPA 300.0 - Anions by EPA Method 300.0										
	Analyte	Result	Qualifier	RL	MDL (Unit	D	Prepared	Analyzed	Dil Fac
	Nitrate-Nitrogen	9.98		0.200	r	mg/l		05/30/13 08:13	05/30/13 10:13	1.00

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Lab Sample ID: SWE0197-07

Matrix: Water

Date Collected: 05/28/13 16:40 Date Received: 05/30/13 08:00

Client Sample ID: RW-1047

Method: EPA 300.0 - Anions by EPA Method 300.0

Analyte RLMDL Unit D Prepared Analyzed Dil Fac 10.2 0.200 mg/l 05/30/13 08:13 05/30/13 10:31 1.00

Nitrate-Nitrogen

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Lab Sample ID: SWE0197-08

Matrix: Water

Date Collected: 05/28/13 17:00 Date Received: 05/30/13 08:00

Client Sample ID: RW-1049

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Client Sample ID: RW-1051 Lab Sample ID: SWE0197-09

. Matrix: Water

Date Collected: 05/28/13 17:25 Date Received: 05/30/13 08:00

Method: EPA 300.0 - Anions by EPA Method 300.0										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Nitrate-Nitrogen	17.1		0.200		mg/l		05/30/13 08:13	05/30/13 11:09	1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Client Sample ID: RW-1054 Lab Sample ID: SWE0197-10 Date Collected: 05/28/13 17:40

Date Received: 05/30/13 08:00

Matrix: Water

Method: EPA 300.0 - Anions by EPA Method 300.0											
	Analyte	Result	Qualifier	RL	MDL	Unit)	Prepared	Analyzed	Dil Fac
	Nitrate-Nitrogen	10.2		0.200		mg/l		_	05/30/13 08:13	05/30/13 11:27	1.00

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Client Sample ID: RW-1085 Lab Sample ID: SWE0197-11 Date Collected: 05/29/13 08:15

Date Received: 05/30/13 08:00

Matrix: Water

Method: EPA 300.0 - Anions by EPA	A Method 300).0							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	8.00		0.200		mg/l		05/30/13 08:13	05/30/13 12:42	1.00

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Analyzed

05/30/13 13:00

Lab Sample ID: SWE0197-12

Matrix: Water

Dil Fac

1.00

Date Collected: 05/29/13 08:00 Date Received: 05/30/13 08:00

Client Sample ID: RW-3085

Method: EPA 300.0 - Anions by EPA Method 300.0 Analyte RLMDL Unit D Prepared Nitrate-Nitrogen ND 0.200 mg/l 05/30/13 08:13

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Lab Sample ID: SWE0197-13

Matrix: Water

Date Collected: 05/29/13 08:57 Date Received: 05/30/13 08:00

Client Sample ID: RW-1093

Method: EPA 300.0 - Anions by EPA Method 300.0

Analyte RLMDL Unit D Prepared Analyzed Dil Fac 7.87 0.200 mg/l 05/30/13 08:13 05/30/13 13:19 1.00

Nitrate-Nitrogen

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Lab Sample ID: SWE0197-14

Matrix: Water

Date Collected: 05/29/13 09:00 Date Received: 05/30/13 08:00

Client Sample ID: RW-2093

Method: EPA 300.0 - Anions by EPA Method 300.0										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Nitrate-Nitrogen	7.84		0.200		mg/l		05/30/13 08:13	05/30/13 13:38	1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Client Sample ID: RW-1094 Lab Sample ID: SWE0197-15

Date Collected: 05/29/13 09:18

Matrix: Water

Date Received: 05/30/13 08:00

Method: EPA 300.0 - Anions by EP	A Method 30	0.0							
Analyte	Result	Qualifier	RL	MDL U	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	4.59		0.200	n	mg/l		05/30/13 08:13	05/30/13 13:56	1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Lab Sample ID: SWE0197-16

Matrix: Water

Date Collected: 05/29/13 09:30 Date Received: 05/30/13 08:00

Client Sample ID: RW-1095

Method: EPA 300.0 - Anions by El							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	11.8	0.200	mg/l		05/30/13 08:13	05/30/13 14:15	1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Client Sample ID: RW-1096 Lab Sample ID: SWE0197-17

Date Collected: 05/29/13 09:45 Matrix: Water

Date Received: 05/30/13 08:00

Method: EPA 300.0 - Anions by EPA	A Method 300	0.0							
Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	16.0		0.200		mg/l		05/30/13 08:13	05/30/13 14:34	1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Lab Sample ID: SWE0197-18

Matrix: Water

Date Collected: 05/29/13 10:08 Date Received: 05/30/13 08:00

Client Sample ID: RW-1158

Method: EPA 300.0 - Anions by EPA Method 300.0

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac

 Nitrate-Nitrogen
 29.4
 2.00
 mg/l
 05/30/13 08:13
 05/30/13 15:48
 10.0

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Client: ARCADIS U.S., Inc. - Liberty Lake

Client Sample ID: RW-1100

Project/Site: [none]

TestAmerica Job ID: SWE0197

Lab Sample ID: SWE0197-19

Matrix: Water

Date Collected: 05/29/13 10:55 Date Received: 05/30/13 08:00

Method: EPA 300.0 - Anions by EPA Method 300.0 Analyte RLMDL Unit D Prepared Analyzed Dil Fac Nitrate-Nitrogen 10.9 0.200 mg/l 05/30/13 08:13 05/30/13 15:11 1.00

TestAmerica Spokane

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Client Sample ID: RW-2100 Lab Sample ID: SWE0197-20

Date Collected: 05/29/13 10:57 Matrix: Water

Date Received: 05/30/13 08:00

Method: EPA 300.0 - Anions by EPA	Method 30	0.0							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	10.9		0.200		mg/l		05/30/13 08:13	05/30/13 15:29	1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Client Sample ID: RW-1103 Lab Sample ID: SWE0197-21

Date Collected: 05/29/13 11:10 Matrix: Water

Date Received: 05/30/13 08:00

Method: EPA 300.0 - Anions by EPA	Method 30	0.0							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	12.3		0.200		mg/l		05/30/13 09:15	05/30/13 17:40	1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Lab Sample ID: SWE0197-22

Matrix: Water

Date Collected: 05/29/13 11:20 Date Received: 05/30/13 08:00

Client Sample ID: RW-1099

Method: EPA 300.0 - Anions by EPA	A Method 300).0							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	14.0		0.200		mg/l		05/30/13 09:15	05/30/13 17:58	1.00

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Lab Sample ID: SWE0197-23

Matrix: Water

Date Collected: 05/29/13 11:50 Date Received: 05/30/13 08:00

Client Sample ID: RW-1149

Method: EPA 300.0 - Anions by EPA Method 300.0										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Nitrate-Nitrogen	13.2		0.200		mg/l		05/30/13 09:15	05/30/13 18:17	1.00

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Lab Sample ID: SWE0197-24

Matrix: Water

Date Collected: 05/29/13 12:25 Date Received: 05/30/13 08:00

Client Sample ID: RW-1107

Method: EPA 300.0 - Anions by EPA Method 300.0 Analyte

RLMDL Unit D Prepared Analyzed Dil Fac Nitrate-Nitrogen 10.4 0.200 mg/l 05/30/13 09:15 05/30/13 18:36 1.00

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Lab Sample ID: SWE0197-25

Matrix: Water

Date Collected: 05/29/13 12:30 Date Received: 05/30/13 08:00

Client Sample ID: RW-2107

Method: EPA 300.0 - Anions by EPA Method 300.0

Analyte RLMDL Unit D Prepared Analyzed Dil Fac Nitrate-Nitrogen 10.4 0.200 mg/l 05/30/13 09:15 05/30/13 18:54 1.00

TestAmerica Job ID: SWE0197

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

Nitrate-Nitrogen

Nitrate-Nitrogen

Nitrate-Nitrogen

Method: EPA 300.0 - Anions by EPA Method 300.0

10.9

10.9

Lab Sample ID: 13E0178-BLK1 Client Sample ID: Method Blank **Matrix: Water Prep Type: Total Analysis Batch: 13E0178** Prep Batch: 13E0178 P

Blank Blank

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	ND		0.200		mg/l		05/30/13 08:13	05/30/13 12:23	1.00

Lab Sample ID: 13E0178-BS1 Client Sample ID: Lab Control Sample **Matrix: Water Prep Type: Total** Analysis Batch: 13E0178 Prep Batch: 13E0178_P LCS LCS %Rec. Spike Added Analyte Result Qualifier Unit D %Rec Limits

4.97

15.9

10.8

mg/l

mg/l

mg/l

99.4

101

90 - 110

80 - 120

Lab Sample ID: 13E0178-MS1 Client Sample ID: RW-2100 **Matrix: Water Prep Type: Total** Analysis Batch: 13E0178 Prep Batch: 13E0178_P Sample Sample Spike Matrix Spike Matrix Spike %Rec. Result Qualifier Added Result Qualifier Unit D %Rec Limits

5.00

5.00

Lab Sample ID: 13E0178-MSD1 Client Sample ID: RW-2100 **Matrix: Water Prep Type: Total Analysis Batch: 13E0178** Prep Batch: 13E0178 P Sample Sample Spike Itrix Spike Dup Matrix Spike Dup %Rec. RPD Result Qualifier Result Qualifier Analyte Added %Rec Limits Limit 10.9 5.00 15.9 Nitrate-Nitrogen ma/l 100 80 _ 120 0.138 12 1

Lab Sample ID: 13E0178-DUP1 Client Sample ID: RW-2100 **Matrix: Water Prep Type: Total** Analysis Batch: 13E0178 Prep Batch: 13E0178_P Sample Sample **Duplicate Duplicate** RPD Limit Analyte Result Qualifier Result Qualifier Unit D RPD

Lab Sample ID: 13E0179-BLK1 Client Sample ID: Method Blank **Matrix: Water Prep Type: Total**

Analysis Batch: 13E0179

Prep Batch: 13E0179_P Blank Blank

Result Qualifier RL MDL Unit Prepared Analyte D Analyzed Dil Fac ND 0.200 05/30/13 09:15 Nitrate-Nitrogen mg/l 05/30/13 20:27

Lab Sample ID: 13E0179-BS1 Client Sample ID: Lab Control Sample **Matrix: Water Prep Type: Total** Analysis Batch: 13E0179 Prep Batch: 13E0179_P LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Nitrate-Nitrogen 5.00 4.66 mg/l 93.2 90 - 110

Lab Sample ID: 13E0179-MS1 Client Sample ID: RW-2107 **Matrix: Water Prep Type: Total**

Prep Batch: 13E0179_P Analysis Batch: 13E0179

Spike Matrix Spike Matrix Spike %Rec. Sample Sample Result Qualifier Added Result Qualifier Unit D %Rec Limits Nitrate-Nitrogen 10.4 5.00 15.5 mq/l 102 80 - 120

TestAmerica Spokane

0.461

13.1

QC Sample Results

Sample Sample

10.4

Result Qualifier

Client: ARCADIS U.S., Inc. - Liberty Lake

Lab Sample ID: 13E0179-MSD1

Analysis Batch: 13E0179

Analysis Batch: 13E0179

Project/Site: [none]

Matrix: Water

Nitrate-Nitrogen

Analyte

TestAmerica Job ID: SWE0197

Client Sample ID: RW-2107

Prep Type: Total

Prep Batch: 13E0179_P

%Rec.

Limits RPD Limit %Rec 80 - 120 12.1 99.7 0.571

Lab Sample ID: 13E0179-DUP1 Client Sample ID: RW-2107

Added

5.00

Matrix: Water Prep Type: Total

Spike ıtrix Spike Dup Matrix Spike Dur

15.4

Result Qualifier

Unit

mg/l

D

Prep Batch: 13E0179_P

Sample Sample **Duplicate Duplicate** Result Qualifier Result Qualifier RPD Limit Analyte Unit D Nitrate-Nitrogen 10.4 10.4 mg/l 0.096 13.1

Project/Site: [none]

Client Sample ID: RW-1030 Lab Sample ID: SWE0197-01 Date Collected: 05/28/13 14:35

Matrix: Water

Date Received: 05/30/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0178	05/30/13 08:39	CBW	TAL SPK

Client Sample ID: RW-3030 Lab Sample ID: SWE0197-02

Date Collected: 05/28/13 14:20 **Matrix: Water** Date Received: 05/30/13 08:00

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Wet Chem 1.00 13E0178 P CBW TAL SPK Total Prep 05/30/13 08:13 TAL SPK Analysis EPA 300.0 1.00 13E0178 05/30/13 08:58 CBW

Client Sample ID: RW-1044 Lab Sample ID: SWE0197-03

Date Collected: 05/28/13 15:25 Matrix: Water

Date Received: 05/30/13 08:00

Total

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Total Prep Wet Chem 1.00 13E0178 P 05/30/13 08:13 CBW TAL SPK EPA 300.0 TAL SPK Total Analysis 1.00 13E0178 05/30/13 09:16 CBW

Client Sample ID: RW-1045 Lab Sample ID: SWE0197-04

Date Collected: 05/28/13 15:47 **Matrix: Water**

Date Received: 05/30/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0178	05/30/13 09:35	CBW	TAL SPK

Client Sample ID: RW-1125 Lab Sample ID: SWE0197-05

Date Collected: 05/28/13 16:05 Matrix: Water

Date Received: 05/30/13 08:00

Г		Batch	Batch		Dilution	Batch	Prepared		
Pre	р Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Tota	al	Prep	Wet Chem		1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK
Tota	al	Analysis	EPA 300.0		1.00	13E0178	05/30/13 09:54	CBW	TAL SPK

Client Sample ID: RW-1046 Lab Sample ID: SWE0197-06

Date Collected: 05/28/13 16:20 Matrix: Water

Date Received: 05/30/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0178	05/30/13 10:13	CBW	TAL SPK

TestAmerica Spokane

Project/Site: [none]

Lab Sample ID: SWE0197-07

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Date Collected: 05/28/13 16:40 Date Received: 05/30/13 08:00

Client Sample ID: RW-1047

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0178	05/30/13 10:31	CBW	TAL SPK

Lab Sample ID: SWE0197-08 Client Sample ID: RW-1049

Matrix: Water

Date Collected: 05/28/13 17:00 Date Received: 05/30/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0178	05/30/13 10:50	CBW	TAL SPK

Client Sample ID: RW-1051 Lab Sample ID: SWE0197-09

Date Collected: 05/28/13 17:25 **Matrix: Water**

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0178	05/30/13 11:09	CBW	TAL SPK

Client Sample ID: RW-1054 Lab Sample ID: SWE0197-10

Date Collected: 05/28/13 17:40

Date Received: 05/30/13 08:00

Date Received: 05/30/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0178	05/30/13 11:27	CBW	TAL SPK

Lab Sample ID: SWE0197-11 Client Sample ID: RW-1085

Date Collected: 05/29/13 08:15

Date Received: 05/30/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0178	05/30/13 12:42	CBW	TAL SPK

Client Sample ID: RW-3085 Lab Sample ID: SWE0197-12

Date Collected: 05/29/13 08:00 Date Received: 05/30/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0178	05/30/13 13:00	CBW	TAL SPK

TestAmerica Spokane

Project/Site: [none]

Lab Sample ID: SWE0197-13 **Client Sample ID: RW-1093**

Date Collected: 05/29/13 08:57 **Matrix: Water**

Date Received: 05/30/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0178	05/30/13 13:19	CBW	TAL SPK

Client Sample ID: RW-2093

Lab Sample ID: SWE0197-14

Matrix: Water Date Collected: 05/29/13 09:00

Date Received: 05/30/13 08:00

	_	Batch	Batch		Dilution	Batch	Prepared		
	Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
	Total	Prep	Wet Chem	·	1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK
ı	Total	Analysis	EPA 300.0		1.00	13E0178	05/30/13 13:38	CBW	TAL SPK

Client Sample ID: RW-1094 Lab Sample ID: SWE0197-15

Date Collected: 05/29/13 09:18 **Matrix: Water**

Date Received: 05/30/13 08:00

		Batch	Batch		Dilution	Batch	Prepared		
Prep	Туре	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	I	Prep	Wet Chem		1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK
Total	I	Analysis	EPA 300.0		1.00	13E0178	05/30/13 13:56	CBW	TAL SPK

Client Sample ID: RW-1095 Lab Sample ID: SWE0197-16

Date Collected: 05/29/13 09:30

Date Received: 05/30/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0178	05/30/13 14:15	CBW	TAL SPK

Lab Sample ID: SWE0197-17 Client Sample ID: RW-1096

Date Collected: 05/29/13 09:45

Date Received: 05/30/13 08:00

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0178	05/30/13 14:34	CBW	TAL SPK

Lab Sample ID: SWE0197-18

Client Sample ID: RW-1158

Date Collected: 05/29/13 10:08 Date Received: 05/30/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK
Total	Analysis	EPA 300.0		10.0	13E0178	05/30/13 15:48	CBW	TAL SPK

TestAmerica Spokane

Matrix: Water

Matrix: Water

Matrix: Water

Project/Site: [none]

Client Sample ID: RW-1100 Lab Sample ID: SWE0197-19 Date Collected: 05/29/13 10:55

Matrix: Water

Date Received: 05/30/13 08:00

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total	Prep	Wet Chem		1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK	-
Total	Analysis	EPA 300.0		1.00	13E0178	05/30/13 15:11	CBW	TAL SPK	

Lab Sample ID: SWE0197-20 Client Sample ID: RW-2100

Matrix: Water Date Collected: 05/29/13 10:57

Date Received: 05/30/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0178_P	05/30/13 08:13	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0178	05/30/13 15:29	CBW	TAL SPK

Client Sample ID: RW-1103 Lab Sample ID: SWE0197-21

Date Collected: 05/29/13 11:10 **Matrix: Water**

Date Received: 05/30/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 09:15	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0179	05/30/13 17:40	CBW	TAL SPK

Client Sample ID: RW-1099 Lab Sample ID: SWE0197-22

Date Collected: 05/29/13 11:20

Date Received: 05/30/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 09:15	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0179	05/30/13 17:58	CBW	TAL SPK

Client Sample ID: RW-1149 Lab Sample ID: SWE0197-23

Date Collected: 05/29/13 11:50

Date Received: 05/30/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 09:15	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0179	05/30/13 18:17	CBW	TAL SPK

Client Sample ID: RW-1107 Lab Sample ID: SWE0197-24

Date Collected: 05/29/13 12:25 Date Received: 05/30/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 09:15	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0179	05/30/13 18:36	CBW	TAL SPK

TestAmerica Spokane

Matrix: Water

Matrix: Water

Matrix: Water

Lab Chronicle

Client: ARCADIS U.S., Inc. - Liberty Lake

Client Sample ID: RW-2107

Date Collected: 05/29/13 12:30

Date Received: 05/30/13 08:00

Project/Site: [none]

TestAmerica Job ID: SWE0197

Lab Sample ID: SWE0197-25

Matrix: Water

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Total Prep Wet Chem 1.00 13E0179_P 05/30/13 09:15 CBW TAL SPK EPA 300.0 13E0179 05/30/13 18:54 CBW Total Analysis 1.00 TAL SPK

Laboratory References:

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

Certification Summary

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

١	Authority	Program	EPA Region	Certification ID	Expiration Date
	Alaska (UST)	State Program	10	UST-071	10-31-13
l	Washington	State Program	10	C569	01-06-14

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Method Summary

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0197

Method	Method Description	Protocol	Laboratory
EPA 300.0	Anions by EPA Method 300.0		TAL SPK

Protocol References:

Laboratory References:

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

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TestAmerica

11922 E. First Ave., Spokane WA 99206-5302 9405 SW Nimbus Ave., Beaverton, OR 97008-7145 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 5755 8th Street East, Tacoma, WA 98424-1317

FAX 924-9290 FAX 906-9210 FAX 563-9210 FAX 922-5047 253-922-2310 509-924-9200 503-906-9200 907-563-9200

LAL-1000 (0612) PAGE OF TA WO ID Turnaround Requests less than standard may incur Rush Charges DATE: 57 35 CA **41** FIRM: THE AMENIAL OF TO DATE. 5 4 3 2 1 < TURNAROUND REQUEST 10 X 5 4 3 2 ETD. Petroleum Hydrocarbon Analyses LOCATION/ COMMENTS Work Order #: SWEUI9 Organic & Inorganic Analyses in Business Days * OTHER Specify: # OF CONT. MATRIX (W, S, O) 2 CHAIN OF CUSTODY REPORT RECEIVED BY: PRINT NAME: RECEIVED BY: PRINT NAME REQUESTED ANALYSES ARDAMOUS - US PRESERVATIVE 21/2019 8 P.O. NUMBER: INVOICE TO DATE TIME DATE FIRM: ARONDOS ADDRESS: 195 N. Legacy ledge Or Soute 2000 PHONE: 508 928, 39109 FAX. 00% Stort N THE LEADER IN ENVIRONMENTAL TESTING PROJECT NAME: YAKIMA VA 1/84 Darus (YVD) ths **4**0年 029 400 640 640 1435 1525 1420 SAMPLING DATE/TIME Longrat 5/82/13 REPORT TO THE MILL LES SAMPLED BY: Sebesal PHONE: 508 928 3900 PROJECT NUMBER: 15 で (で (を) CLIENT AROADIS -3030 390 1830 1-1830 CLIENT SAMPLE IDENTIFICATION 13 ADDITIONAL REMARKS 1 RELEASED BY: PRINT NAME. RELEASED BY PRINT NAME:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8th Street East, Tacoma, WA 98424-1317

FAX 906-9210 FAX 563-9210 FAX 922-5047 FAX 924-9290 253-922-2310 509-924-9200 503-906-9200 907-563-9200

> 9405 SW Nimbus Ave., Beaverton, OR 97008-7145 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 11922 E. First Ave., Spokane WA 99206-5302

WO ID DATE: 5-3015 nd Requests less than standard may incur Rush Charges **<1** 5 4 3 2 1 <1 TURNAROUND REQUEST TIME LOCATION/ COMMENTS 10 X 5 4 3 2 2 5 700 Work Order #SNIE019 in Business Days * OTHER | Specify: FIRM OF Spoken #OF MATRIX (W, S, O) 3 CHAIN OF CUSTODY REPORT RECEIVED BY: PRINT NAME: REQUESTED ANALYSES STORP IS - US PRESERVATIVE DATE: 5/29/13 1500 P.O. NUMBER INVOICE TO TIME ADDRESS: 675 N. LONGOLD ENDO DE SOUT. #200.
PHONE: LANG HOLDE LA 49019 FIRST ALCORDIS Shorte V ≫ 105年 したり \$54 28 945 8001 200 900 913 PROJECT NAME: YAKLIMA VAILLY DONLES SAMPLING DATE/TIME SAMPLED BY: Sebes de De Jones 5-29-13 PROJECT NUMBER: 187 CLIENT: RECEDES CLIENT SAMPLE IDENTIFICATION RW-1035 RW - 1093 RW-2073 MN - SOXD RW-1096 DW-1265 RW-1155 Rw- 11nd RW-1094 PRINT NAME: 🖌 RELEASED BY:

DATE

TEMP:

FIRM

RECEIVED BY: PRINT NAME:

DATE TIME

ADDITIONAL REMARKS:

RELEASED BY: PRINT NAME:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8th Street East, Tacoma, WA 98424-1317 11922 E. First Ave., Spokane WA 99206-5302 9405 SW Nimbus Ave., Beaverton, OR 97008-7145 2000 W International Airport Rd Ste Allo, Anchorage, AK 99502-1119

FAX 922-5047 FAX 924-9290 FAX 906-9210 FAX 563-9210 253-922-2310 509-924-9200 503-906-9200 907-563-9200

)	CHAIN OF CUSTODY REPORT	Y REPORT	Work Order #: SWEO1977
CLIENT RECHOS		INVOICE TO:		TURNAROUND REQUEST
ADDRESS: 1915 N. LEGYCY RIGGE Dr Stude 300	Je 200	ARCADIS US	S)	in Business Days * Organic & Inorganic Analyses 10
PHONE: FAX:		P.O. NUMBER:		m Hydrocarbon Analyses
PROJECT NAME: VVD	_	PRESERVATIVE	AITVE	5 4 3 2 1 -<1
PROJECT NUMBER: 750		REOTESTED ANALYSES	ANALYSES	OTHER Specify:
SAMPLED BY: September + Delpro-	20 54			¬22
CLIENT SAMPLE SAMPLING IDENTIFICATION DATE/TIME	M1472 EPA33			MATRIX # OF LOCATION/ TA (W, S, O) CONT. COMMENTS WO ID
1 RIV-1103 5/29/13 1110	X			7
2 RW-1099 1	1 0			
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RELEASED BYY PRINT NAME: X8 FIRM	FIRM AROUNDS	DATE: 9/29/13	RECEIVED BY: WASHIM PRINT NAME: CALL OF	FIRM: The Jostane man ONO
RELEASED BY: PRINT NAME:) }	DATE: TIME:	RECEIVED BY: PRINT NAME:	PIRM: TIME:
ADDITIONAL REMARKS:				TEMP: PAGE A.OF
				TAL-1000 (0612)

TestAmerica Spokane Sample Receipt Form

		•		γ	
Work Order #: WE019.7 Cllent: Arcadis	9			Project: YV	Ď.
Date/Time Received: 4.30.(3 0800	By: Cl	1519 6	Villame	ζ	
Samples Delivered By: Shipping Service Courier Client	t []Other	FFDer	803	32 7555	3789
List Air Bill Number(s) or Attach a photocopy of the Air Bili:					
Receipt Phase	Yes	No	NA.		Cameroute
	196	NO	INA		Comments
Were samples received in a cooler:					
Custody Seals are present and intact:					
Are CoC documents present:		·			
Necessary signatures:	1				
Thermal Preservation Type: Blue Ice Gel Ice Real Ice	Dry Ice	□None	Other:_		
Temperature: 4.6 °C Thermometer (Circle one Serial #12	2208348 Ka	iying IR	Serial # 11	1874910 IR Gun	2)(acceptance criteria 0-6
	w/in 4hrs of	collection	□NA □	Other:	
Log-in Phase Date/Time: 63013 8145 By:	Yes	Νo	NA		Comments
Are sample labels affixed and completed for each container	χ				
Samples containers were received intact:	X				
Do sample IDs match the CoC	X				
Appropriate sample containers were received for tests requested	×			·	
Are sample volumes adequate for tests requested	x				
Appropriate preservatives were used for the tests requested	X				
	X				
pH of inorganic samples checked and is within method specification	/		V		WE NO THE STATE OF
Are VOC samples free of bubbles >6mm (1/4" diameter)			\(\frac{1}{\sqrt{2}}\)		
Are dissolved parameters field filtered					
Do any samples need to be filtered or preserved by the lab		V	_X		
Does this project require quick turnaround analysis	3.0	_Х			
Are there any short hold time tests (see chart below)	X			Nitrođe	
Are any samples within 2 days of or past expiration	X	-) XC	<u> </u>	Nitrate	2
Was the CoC scanned	\propto				
Were there Non-conformance issues at login	(<u> </u>	>		Programme and the Programme is a second of the Programme in the Programme
If yes, was a CAR generated #			\sim		

24 hours or less	48 hours	7 days
Coliform Bacteria	BOD, Color, MBAS	TDS, TSS, VDS, FDS
Chromium +6	Nitrate/Nitrite	Sulfide
	Orthophosphate	Aqueous Organic Prep

Form No. SP-FORM-SPL-002 12 December 2012



Appendix B

TestAmerica Labs Analytical Report SWE0206



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Spokane 11922 East 1st. Avenue Spokane, WA 99206 Tel: (509)924-9200

TestAmerica Job ID: SWE0206

Client Project/Site: [none]

Client Project Description: Yakima Dairies

For:

ARCADIS U.S., Inc. - Liberty Lake 695 N. Legacy Ridge Drive, Suite 200 Liberty Lake, WA 99019

Attn: Tom Mullen

tandissector

Authorized for release by: 6/4/2013 1:55:23 PM

Randee Decker, Project Manager Randee.Decker@testamericainc.com

·····LINKS ······

Review your project results through
Total Access

Have a Question?



Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: ARCADIS U.S., Inc. - Liberty Lake Project/Site: [none]

TestAmerica Job ID: SWE0206

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Sample Summary

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SWE0206-01	RW-1108	Water	05/29/13 14:00	05/30/13 15:40
SWE0206-02	RW-1101	Water	05/29/13 14:20	05/30/13 15:40
SWE0206-03	RW-1172	Water	05/29/13 14:35	05/30/13 15:40
SWE0206-04	RW-3108	Water	05/29/13 13:50	05/30/13 15:40
SWE0206-05	RW-1078	Water	05/29/13 16:33	05/30/13 15:40
SWE0206-06	RW-1152	Water	05/29/13 16:00	05/30/13 15:40
SWE0206-07	RW-2152	Water	05/29/13 16:05	05/30/13 15:40
SWE0206-08	RW-1092	Water	05/29/13 15:40	05/30/13 15:40
SWE0206-09	RW-1084	Water	05/29/13 15:20	05/30/13 15:40
SWE0206-10	RW-1086	Water	05/30/13 08:55	05/30/13 15:40
SWE0206-11	RW-3086	Water	05/30/13 08:50	05/30/13 15:40
SWE0206-12	RW-1102	Water	05/30/13 09:40	05/30/13 15:40
SWE0206-13	RW-2102	Water	05/30/13 09:45	05/30/13 15:40
SWE0206-14	RW-1062	Water	05/30/13 10:05	05/30/13 15:40
SWE0206-15	RW-1087	Water	05/30/13 10:15	05/30/13 15:40
SWE0206-16	RW-1090A	Water	05/30/13 10:50	05/30/13 15:40
SWE0206-17	RW-1090B	Water	05/30/13 10:55	05/30/13 15:40
SWE0206-18	RW-1012	Water	05/30/13 11:40	05/30/13 15:40
SWE0206-19	RW-1011	Water	05/30/13 11:55	05/30/13 15:40

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Definitions/Glossary

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Glossary

RPD

TEF

TEQ

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Client Sample ID: RW-1108 Lab Sample ID: SWE0206-01

Date Collected: 05/29/13 14:00 Matrix: Water

Date Received: 05/30/13 15:40

Method: EPA 300.0 - Anions by EPA Method 300.0								
	Analyte	Result Qu	ualifier RL	MDL Unit	. D	Prepared	Analyzed	Dil Fac
	Nitrate-Nitrogen	20.3	2.00	mg/		05/30/13 16:45	05/31/13 08:14	10.0

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Client Sample ID: RW-1101 Lab Sample ID: SWE0206-02

Date Collected: 05/29/13 14:20 Matrix: Water

Date Received: 05/30/13 15:40

Method: EPA 300.0 - Anions by EPA Method 300.0											
İ	Analyte	Result (Qualifier	RL	MDL	Unit	D)	Prepared	Analyzed	Dil Fac
	Nitrate-Nitrogen	18.2		0.200		mg/l		05	5/30/13 16:45	05/30/13 21:04	1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Lab Sample ID: SWE0206-03

Matrix: Water

Date Collected: 05/29/13 14:35 Date Received: 05/30/13 15:40

Client Sample ID: RW-1172

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Dil Fac

1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Lab Sample ID: SWE0206-04

Matrix: Water

Date Collected: 05/29/13 13:50 Date Received: 05/30/13 15:40

Client Sample ID: RW-3108

Method: EPA 300.0 - Anions by EP	A Method 30	0.0						
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fa
Nitrate-Nitrogen	ND		0.200	mg/l		05/30/13 16:45	05/30/13 21:42	1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Lab Sample ID: SWE0206-05

Matrix: Water

Date Collected: 05/29/13 16:33 Date Received: 05/30/13 15:40

Client Sample ID: RW-1078

Method: EPA 300.0 - Anions by EPA Method 300.0 Analyte

RLMDL Unit D Prepared Analyzed Dil Fac Nitrate-Nitrogen 12.4 0.200 mg/l 05/30/13 16:45 05/30/13 22:00 1.00

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Lab Sample ID: SWE0206-06

Matrix: Water

Date Collected: 05/29/13 16:00 Date Received: 05/30/13 15:40

Client Sample ID: RW-1152

Method: EPA 300.0 - Anions by EPA Method 300.0

Analyte RLMDL Unit D Prepared Analyzed Dil Fac Nitrate-Nitrogen 15.8 0.200 mg/l 05/30/13 16:45 05/30/13 22:19 1.00

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Lab Sample ID: SWE0206-07

Matrix: Water

Date Collected: 05/29/13 16:05 Date Received: 05/30/13 15:40

Client Sample ID: RW-2152

Method: EPA 300.0 - Anions by EPA Method 300.0

Analyte RLMDL Unit D Prepared Analyzed Dil Fac Nitrate-Nitrogen 15.6 0.200 mg/l 05/30/13 16:45 05/30/13 22:38 1.00

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Lab Sample ID: SWE0206-08

Matrix: Water

Date Collected: 05/29/13 15:40 Date Received: 05/30/13 15:40

Client Sample ID: RW-1092

Method: EPA 300.0 - Anions by EPA Method 300.0

Analyte RLMDL Unit D Prepared Analyzed Dil Fac Nitrate-Nitrogen 8.30 0.200 mg/l 05/30/13 16:45 05/30/13 22:56 1.00

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Client Sample ID: RW-1084 Lab Sample ID: SWE0206-09

Date Collected: 05/29/13 15:20 Matrix: Water

Date Received: 05/30/13 15:40

Method: EPA 300.0 - Anions by EF	PA Method 300.	0					
Analyte	Result C	Qualifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	7.91	0.200	mg/l		05/30/13 16:45	05/30/13 23:15	1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Analyzed

Lab Sample ID: SWE0206-10

Matrix: Water

Dil Fac

Date Collected: 05/30/13 08:55 Date Received: 05/30/13 15:40

Client Sample ID: RW-1086

Method: EPA 300.0 - Anions by EPA Method 300.0

Analyte Result Qualifier RL MDL Unit D Prepared

 Nitrate-Nitrogen
 16.8
 0.200
 mg/l
 05/30/13 16:45
 05/30/13 23:33
 1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Client Sample ID: RW-3086

Project/Site: [none]

TestAmerica Job ID: SWE0206

Lab Sample ID: SWE0206-11

Matrix: Water

Date Collected: 05/30/13 08:50 Date Received: 05/30/13 15:40

Method: EPA 300.0 - Anions by EPA Method 300.0 Analyte RLMDL Unit D Analyzed Dil Fac Prepared

Nitrate-Nitrogen ND 0.200 mg/l 05/30/13 16:45 05/30/13 23:52 1.00

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Lab Sample ID: SWE0206-12

Matrix: Water

Date Collected: 05/30/13 09:40 Date Received: 05/30/13 15:40

Client Sample ID: RW-1102

Method: EPA 300.0 - Anions by EPA Method 300.0 Analyte

RLMDL Unit D Prepared Analyzed Dil Fac Nitrate-Nitrogen 18.2 0.200 mg/l 05/30/13 16:45 05/31/13 00:11 1.00

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Lab Sample ID: SWE0206-13

Matrix: Water

Date Collected: 05/30/13 09:45 Date Received: 05/30/13 15:40

Client Sample ID: RW-2102

Method: EPA 300.0 - Anions by EPA Method 300.0							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	18.4	0.200	mg/l		05/30/13 16:45	05/31/13 00:29	1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Lab Sample ID: SWE0206-14

Matrix: Water

Date Collected: 05/30/13 10:05

Date Received: 05/30/13 15:40

Client Sample ID: RW-1062

Method: EPA 300.0 - Anions by EPA Method 300.0									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	3.67		0.200		mg/l		05/30/13 16:45	05/31/13 00:48	1.00

Client: ARCADIS U.S., Inc. - Liberty Lake

Client Sample ID: RW-1087

Project/Site: [none]

TestAmerica Job ID: SWE0206

Lab Sample ID: SWE0206-15

Matrix: Water

Date Collected: 05/30/13 10:15 Date Received: 05/30/13 15:40

Method: EPA 300.0 - Anions by EPA Method 300.0 Analyte RLMDL Unit D Prepared Analyzed Dil Fac Nitrate-Nitrogen 3.82 0.200 mg/l 05/30/13 16:45 05/31/13 01:06 1.00

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Lab Sample ID: SWE0206-16

Matrix: Water

Dil Fac 10.0

Date Collected: 05/30/13 10:50 Date Received: 05/30/13 15:40

Client Sample ID: RW-1090A

Method: EPA 300.0 - Anions by EPA Method 300.0								
Analyte	Result Qualifier	RL	MDL Uni	t D	Prepared	Analyzed		
Nitrate-Nitrogen	23.8	2.00	mg.	<u>/I</u>	05/31/13 07:20	05/31/13 12:16		

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Lab Sample ID: SWE0206-17

Matrix: Water

Date Collected: 05/30/13 10:55 Date Received: 05/30/13 15:40

Client Sample ID: RW-1090B

Method: EPA 300.0 - Anions by EPA Method 300.0 Analyte RLMDL Unit D Prepared Analyzed Dil Fac Nitrate-Nitrogen 23.0 2.00 mg/l 05/31/13 07:20 05/31/13 12:35

10.0

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Lab Sample ID: SWE0206-18

Matrix: Water

Date Collected: 05/30/13 11:40 Date Received: 05/30/13 15:40

Client Sample ID: RW-1012

Method: EPA 300.0 - Anions by EP	A Method 300	0.0							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	5.63		0.200		mg/l	_	05/31/13 07:20	05/31/13 09:10	1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Lab Sample ID: SWE0206-19

Matrix: Water

Date Collected: 05/30/13 11:55 Date Received: 05/30/13 15:40

Client Sample ID: RW-1011

Method: EPA 300.0 - Anions by EPA Method 300.0

Analyte RLMDL Unit D Prepared Analyzed Dil Fac 4.00 mg/l 05/31/13 07:20 05/31/13 12:53 20.0

Nitrate-Nitrogen 30.6

Project/Site: [none]

Method: EPA 300.0 - Anions by EPA Method 300.0

Lab Sample ID: 13E0179-BLK1 Client Sample ID: Method Blank **Matrix: Water Prep Type: Total** Analysis Batch: 13E0179 Prep Batch: 13E0179_P

Blank Blank

Result Qualifier RL MDL Unit D Dil Fac Analyte Prepared Analyzed 0.200 05/30/13 09:15 Nitrate-Nitrogen ND mg/l 05/30/13 20:27 1.00

Lab Sample ID: 13E0179-BS1 Client Sample ID: Lab Control Sample **Matrix: Water Prep Type: Total** Analysis Batch: 13E0179 Prep Batch: 13E0179_P LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits

Lab Sample ID: 13E0179-MS1 Client Sample ID: Matrix Spike

4.66

mg/l

93.2

90 - 110

Prep Type: Total

Client Sample ID: Duplicate

Prep Type: Total

Prep Batch: 13E0187_P

5.00

Matrix: Water

Analysis Batch: 13E0179

Nitrate-Nitrogen

Prep Batch: 13E0179_P Sample Sample Spike Matrix Spike Matrix Spike %Rec. Result Qualifier Added Result Qualifier Unit D %Rec Limits 10.4 5.00 15.5 102 80 - 120 Nitrate-Nitrogen mg/l

Lab Sample ID: 13E0179-MSD1 Client Sample ID: Matrix Spike Duplicate **Matrix: Water Prep Type: Total** Analysis Batch: 13E0179 Prep Batch: 13E0179 P Sample Sample Spike Itrix Spike Dup Matrix Spike Dup %Rec. RPD

Result Qualifier Result Qualifier Analyte Added %Rec Limits Limit 10.4 5.00 15.4 Nitrate-Nitrogen ma/l 99.7 80 _ 120 0.571 12 1

Lab Sample ID: 13E0179-DUP1

Analysis Batch: 13E0179

Matrix: Water Prep Type: Total Prep Batch: 13E0179_P Sample Sample **Duplicate Duplicate** RPD

Result Qualifier D Limit Analyte Result Qualifier Unit RPD Nitrate-Nitrogen 10.4 10.4 mg/l 13.1 0.096

Lab Sample ID: 13E0187-BLK1 Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 13E0187

Blank Blank Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Nitrate-Nitrogen ND 0.200 mg/l 05/31/13 07:20 05/31/13 11:58 1.00

Lab Sample ID: 13E0187-BS1 **Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total** Analysis Batch: 13E0187 Prep Batch: 13E0187_P Spike LCS LCS %Rec.

Added Result Qualifier Unit %Rec Limits Nitrate-Nitrogen 5.00 4.69 mg/l 93.8 90 - 110

QC Sample Results

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Client Sample ID: RW-1011

Prep Type: Total

Method: EPA 300.0 - Anions by EPA Method 300.0 (Continued)

Lab Sample ID: 13E0187-MS1

Matrix: Water

Analysis Batch: 13E0187

Sample Sample Sample

Spike Matrix Spike Matrix Spike

Matrix Spike Matrix Spike

Rec.

 Analyte
 Result Nitrogen
 Qualifier No. 2
 Added No. 2
 Result No. 2
 Qualifier No. 2
 Unit No. 2
 Do. 2
 No. 2
 Limits No. 2

Lab Sample ID: 13E0187-MSD1 Client Sample ID: Matrix Spike Duplicate **Matrix: Water Prep Type: Total** Analysis Batch: 13E0187 Prep Batch: 13E0187_P Sample Sample Spike ıtrix Spike Dup Matrix Spike Dur %Rec. Analyte Result Qualifier Added Result Qualifier RPD Limit D %Rec Limits Nitrate-Nitrogen ND 5.00 4.70 mg/l 93.9 80 - 120 0.932 12.1

Lab Sample ID: 13E0187-DUP1

Matrix: Water

Analysis Batch: 13E0187							Prep Batch: 13E	01	87_P
	Sample	Sample	Duplicate	Duplicate					RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD)	Limit
Nitrate-Nitrogen	30.6		30.2		mg/l		1.32	2	13.1

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Project/Site: [none]

Lab Sample ID: SWE0206-01

Matrix: Water

Client Sample ID: RW-1108 Date Collected: 05/29/13 14:00 Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 16:45	CBW	TAL SPK
Total	Analysis	EPA 300.0		10.0	13E0179	05/31/13 08:14	CBW	TAL SPK

Lab Sample ID: SWE0206-02

Matrix: Water

Client Sample ID: RW-1101 Date Collected: 05/29/13 14:20 Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 16:45	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0179	05/30/13 21:04	CBW	TAL SPK

Client Sample ID: RW-1172 Lab Sample ID: SWE0206-03

Matrix: Water

Date Collected: 05/29/13 14:35 Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 16:45	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0179	05/30/13 21:23	CBW	TAL SPK

Client Sample ID: RW-3108 Lab Sample ID: SWE0206-04

Date Collected: 05/29/13 13:50

Matrix: Water

Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 16:45	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0179	05/30/13 21:42	CBW	TAL SPK

Client Sample ID: RW-1078 Lab Sample ID: SWE0206-05

Date Collected: 05/29/13 16:33 **Matrix: Water**

Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 16:45	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0179	05/30/13 22:00	CBW	TAL SPK

Client Sample ID: RW-1152 Lab Sample ID: SWE0206-06

Date Collected: 05/29/13 16:00 Matrix: Water

Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 16:45	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0179	05/30/13 22:19	CBW	TAL SPK

TestAmerica Spokane

Project/Site: [none]

Client Sample ID: RW-2152 Lab Sample ID: SWE0206-07

Date Collected: 05/29/13 16:05 Matrix: Water

Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 16:45	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0179	05/30/13 22:38	CBW	TAL SPK

Lab Sample ID: SWE0206-08 Client Sample ID: RW-1092

Matrix: Water Date Collected: 05/29/13 15:40

Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 16:45	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0179	05/30/13 22:56	CBW	TAL SPK

Client Sample ID: RW-1084 Lab Sample ID: SWE0206-09

Date Collected: 05/29/13 15:20 **Matrix: Water**

Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 16:45	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0179	05/30/13 23:15	CBW	TAL SPK

Client Sample ID: RW-1086 Lab Sample ID: SWE0206-10

Date Collected: 05/30/13 08:55

Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 16:45	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0179	05/30/13 23:33	CBW	TAL SPK

Lab Sample ID: SWE0206-11 Client Sample ID: RW-3086

Date Collected: 05/30/13 08:50

Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 16:45	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0179	05/30/13 23:52	CBW	TAL SPK

Client Sample ID: RW-1102 Lab Sample ID: SWE0206-12

Date Collected: 05/30/13 09:40 Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 16:45	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0179	05/31/13 00:11	CBW	TAL SPK

TestAmerica Spokane

Matrix: Water

Matrix: Water

Matrix: Water

Project/Site: [none]

Lab Sample ID: SWE0206-13 **Client Sample ID: RW-2102** Date Collected: 05/30/13 09:45

Matrix: Water

Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 16:45	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0179	05/31/13 00:29	CBW	TAL SPK

Lab Sample ID: SWE0206-14 Client Sample ID: RW-1062

Matrix: Water Date Collected: 05/30/13 10:05

Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 16:45	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0179	05/31/13 00:48	CBW	TAL SPK

Client Sample ID: RW-1087 Lab Sample ID: SWE0206-15

Date Collected: 05/30/13 10:15 **Matrix: Water**

Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total	Prep	Wet Chem		1.00	13E0179_P	05/30/13 16:45	CBW	TAL SPK	
Total	Analysis	EPA 300.0		1.00	13E0179	05/31/13 01:06	CBW	TAL SPK	

Client Sample ID: RW-1090A Lab Sample ID: SWE0206-16

Date Collected: 05/30/13 10:50

Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0187_P	05/31/13 07:20	CBW	TAL SPK
Total	Analysis	EPA 300.0		10.0	13E0187	05/31/13 12:16	CBW	TAL SPK

Lab Sample ID: SWE0206-17 Client Sample ID: RW-1090B

Date Collected: 05/30/13 10:55 Matrix: Water

Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0187_P	05/31/13 07:20	CBW	TAL SPK
Total	Analysis	EPA 300.0		10.0	13E0187	05/31/13 12:35	CBW	TAL SPK

Client Sample ID: RW-1012 Lab Sample ID: SWE0206-18

Date Collected: 05/30/13 11:40 **Matrix: Water**

Date Received: 05/30/13 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0187_P	05/31/13 07:20	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0187	05/31/13 09:10	CBW	TAL SPK

TestAmerica Spokane

Matrix: Water

Lab Chronicle

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Lab Sample ID: SWE0206-19

Matrix: Water

Date Collected: 05/30/13 11:55 Date Received: 05/30/13 15:40

Client Sample ID: RW-1011

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0187_P	05/31/13 07:20	CBW	TAL SPK
Total	Analysis	EPA 300.0		20.0	13E0187	05/31/13 12:53	CBW	TAL SPK

Laboratory References:

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

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Certification Summary

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-071	10-31-13
Washington	State Program	10	C569	01-06-14

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Method Summary

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0206

Method	Method Description	Protocol	Laboratory
EPA 300.0	Anions by EPA Method 300.0		TAL SPK

Protocol References:

Laboratory References:

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

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TAL-1000 (0612)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8th Stroot East, Tacoura, WA 98424-1317 11922 E. First Ave., Spokane WA 99206-5302 9405 SW Nimbus Ave., Beaverton, OR 97008-7145 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

A 98424-1317 253-922-2310 FAX 922-5047 29206-5302 509-924-9200 FAX 924-9290 FAX 924-9290 FAX 908-7145 503-906-9200 FAX 965-9210 FAX 563-9210 FAX 563-9210

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				CHAIN	CHAIN OF CUSTODY REPORT	Y REPORT		Work Order	Work Order #PMF720(
CLIENT: NO AND				INVOICE TO:	TO:			TURN	AROUND REQUEST	
REPORT TO TOM MULLETY LIGHT BY. Suit 200	vacy Rules	Dr. Smi	to 200	<u>₩</u>	AROADIS - US	MS MS		Organic 10 X	in Business Days * Organic & Inorganic Analyses	7
PHONE	FAX:			P.O. NUMBER:	BER:				m Hydrocarbon Analyses]
PROJECT NAME: YVD					PRESERVATIVE	ATIVE	-	3 E	3 2 1 <1	
PROJECT NUMBER: TRO	£	1			REQUESTED ANALYSES	ANALYSES		OTHER	Specify:	
SAMPLED BY: SUNBOR +	1 12 Xens	1.00	Q4 57					* Turnaround Requests	* Turnaround Requests less than standard may incur Rush Charges	ush Charges.
CLIENT SAMPLE DENTIFICATION	SAMPLING	7	JEAN EHAA HUUN					MATRIX # OF (W, S, O) CONT.	LOCATION/ COMMENTS	TA WO ID
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10 PUN - 10510	5/30/13	88					0			
RELEASED BY THE F	E. Marley	FIRM: A	FIRM: KR1 4015	DATE	5/30/13	RECEIVED BY: PRINT NAME:	Madden	FIRM: T	DATE S.	1.00
RELEASED BY:				DATE		RECEIVED BY:	1		DATE	
PRINT NAME:		FIRM:		TIME:		PRINT NAME:		FIRM:	TIME	
ADDITIONAL REMARKS:									1.9 PAGE	I or 1

TestAmerica

5755 8th Street East, Tacoma, WA 98424-1317 11922 E. First Ave., Spokane WA 99206-5302

FAX 922-5047 FAX 924-9290 253-922-2310 509-924-9200

		2000	94.0 5 V VIOS-7145 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119	708-7145 503-906-9200 FAX 906-9210 502-1119 907-563-9200 FAX 563-9210
THE LEADER IN ENVIRONMENTAL TESTING	MENTAL TESTING			
		CHAIN OF CUSTODY REPORT	ODY REPORT	Work Order #: SWEO206
CLIENT: 4KBATYS		INVOICE TO:		TURNAROUND REQUEST
ADDRESS. 1095 N. Lagary Ridge Drive Suite 200	Ridge Drive Swith		HECARIS-US	in Business Days * Organic & Inorganic Analyses 10
PHONE: FAX:)	P.O. NUMBER:		Petroleum Hydrocarbon Analy
THAME: YVD		PRESI	PRESERVATIVE	5 4 3 2 1 <1
PROJECT NUMBER: TBD		REQUESTI	REQUESTED ANALYSES	OTHER Specify:
SAMPLED BY: SCHOKLEY XXX	Sylve Level			* Turnaround Requests less than standard may incur Rush Charges.
P	SAMPENG STATE DATESTIME 22 ST			MATRIX # OF LOCATION TA (W, S, O) CONT. COMMENTS WOLD
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2 KW-1102	1 046			
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18 IN -1190B	1055			
* RW-1012	1140			
, RW-1011	1155 \			
01				
RELEASED BY: THE SELECTION OF THE CONTRACT OF	Clea FIRM: ARCHOIS	DATE: 5/30/13	RECEIVED BY. (IL HIM)	PIRAL J. G. HIMBELLE TIME 15.40
RELEASED BY:			RECEIVED BY:	•
PRINT NAME:	FIRM:	TIME:	PRINT NAME:	FIRM: TIME:
ADDITIONAL REMARKS:				L'A PAGE OF
/20				KS.

Work Order #SWEUZUL	Client: Arcadis	,			Project: Yak	ima D	uiries_
Date/Time Received: 153013 15:40)	By CS					
Samples Delivered By: Shipping Service	e Courier Action	t _Other	: <u></u>				→
List Air Bill Number(s) or Attach a photocop	y of the Air Bill:	•	4				
Receipt Phase		Yes	Nó	NA		Comments	
Were samples received in a cooler:		70					
Custody Seals are present and intact:		`_					
Are CoC documents present:		7					
Necessary signatures:		7					
Thermal Preservation Type: Blue Ice	_Gelice _⊠Realice	∐Dry Ice	□None	□Other:_		· · · · · · · · · · · · · · · · · · ·	
Temperature: \(\frac{1}{\infty}\) \(\frac{\infty}{\infty}\) \(\frac{\infty}{\infty}\) \(\frac{\infty}{\infty}\) Thermomete	er (Circle one Serial#1 2	2208348 K	eyring IR	Serial # 11	1874910 IR Gur	ı 2)(acceptan	ce criteria 0-6
Temperature out of range: Not enough i	ice	w/in 4hrs of	collection	□NA [Other:		
Log-in Phase, 30/13 1/30	ву: <i>(</i> <u>У</u>	Yes	No	NÅ		Comments	
Are sample labels affixed and completed for	r each container	>					
Samples containers were received intact:		صر					
Do sample IDs match the CoC							
Appropriate sample containers were receive	ed for tests requested						
Are sample volumes adequate for tests requ	uested	<u> </u>	71				
Appropriate preservatives were used for the	tests requested	_					
pH of inorganic samples checked and is with	hin method specification	1					
Are VOC samples free of bubbles >6mm (1)	/4" diameter)						
Are dissolved parameters field filtered							
Do any samples need to be filtered or prese	rved by the lab						
Does this project require quick turnaround a	ınalysis		>				
Are there any short hold time tests (see cha	rt below)	<u>~</u>	÷		Nitrate		
Are any samples within 2 days of or past exp	piration		_	>	, , , , , , , , , , , , , , , , , , ,		21-24- 3-4-2-2
Was the CoC scanned		~					
Were there Non-conformance issues at logi	n		70				
If yes, was a CAR generated, #				7			

TestAmerica Spokane Sample Receipt Form

24 hours or less	48 hours	7 days
Coliform Bacteria	BOD, Color, MBAS	TDS, TSS, VDS, FDS
Chromium +6	Nitrate/Nitrite	Sulfide
	Orthophosphate	Aqueous Organic Prep

Form No. SP-FORM-SPL-002 12 December 2012



Appendix C

TestAmerica Labs Analytical Report SWE0207



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Spokane 11922 East 1st. Avenue Spokane, WA 99206 Tel: (509)924-9200

TestAmerica Job ID: SWE0207

Client Project/Site: [none]

Client Project Description: Yakima Dairies

For:

ARCADIS U.S., Inc. - Liberty Lake 695 N. Legacy Ridge Drive, Suite 200 Liberty Lake, WA 99019

Attn: Tom Mullen

tanduseder

Authorized for release by: 6/4/2013 2:04:46 PM

Randee Decker, Project Manager Randee.Decker@testamericainc.com

----- LINKS -----

Review your project results through

Total Access

Have a Question?



Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: ARCADIS U.S., Inc. - Liberty Lake Project/Site: [none]

TestAmerica Job ID: SWE0207

Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions	
Client Sample Results	5
QC Sample Results	10
Chronicle	11
Certification Summary	12
Method Summary	
Chain of Custody	14

Sample Summary

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0207

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SWE0207-01	RW-3097	Water	05/30/13 13:50	05/31/13 08:00
SWE0207-02	RW-1091	Water	05/30/13 15:38	05/31/13 08:00
SWE0207-03	RW-1097	Water	05/30/13 13:55	05/31/13 08:00
SWE0207-04	RW-1110	Water	05/30/13 14:30	05/31/13 08:00
SWF0207-05	RW-1171	Water	05/30/13 15:00	05/31/13 08:00

Definitions/Glossary

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0207

Glossary

RPD

TEF

TEQ

Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0207

Lab Sample ID: SWE0207-01

Date Collected: 05/30/13 13:50 Matrix: Water

Date Received: 05/31/13 08:00

Client Sample ID: RW-3097

Method: EPA 300.0 - Anions by EPA	A Method 300	.0							
Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	ND		0.200		mg/l		05/31/13 09:30	05/31/13 10:06	1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Client Sample ID: RW-1091

Project/Site: [none]

TestAmerica Job ID: SWE0207

Lab Sample ID: SWE0207-02

. Matrix: Water

Date Collected: 05/30/13 15:38
Date Received: 05/31/13 08:00

Method: EPA 300.0 - Anions by EPA Method 300.0

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Nitrata Nitragan	2 42	0.200	ma/l		05/31/13 00:30	05/31/13 10:24	1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0207

Client Sample ID: RW-1097 Lab Sample ID: SWE0207-03

Date Collected: 05/30/13 13:55 Matrix: Water

Date Received: 05/31/13 08:00

Method: EPA 300.0 - Anions by EPA	A Method 30	0.0							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	10.1		0.200		mg/l		05/31/13 09:30	05/31/13 10:43	1.00

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0207

Lab Sample ID: SWE0207-04

Matrix: Water

Date Collected: 05/30/13 14:30 Date Received: 05/31/13 08:00

Client Sample ID: RW-1110

Method: EPA 300.0 - Anions by EPA Method 300.0

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Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0207

Lab Sample ID: SWE0207-05

Matrix: Water

Date Collected: 05/30/13 15:00 Date Received: 05/31/13 08:00

Client Sample ID: RW-1171

Method: EPA 300.0 - Anions by EPA	A Method 30	0.0							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate-Nitrogen	12.7		0.200		mg/l		05/31/13 09:30	05/31/13 11:20	1.00

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TestAmerica Job ID: SWE0207

Project/Site: [none]

Nitrate-Nitrogen

Nitrate-Nitrogen

Client: ARCADIS U.S., Inc. - Liberty Lake

Method: EPA 300.0 - Anions by EPA Method 300.0

ND

Lab Sample ID: 13E0187-BLK1

Client Sample ID: Method Blank
Matrix: Water

Prep Type: Total

Analysis Batch: 13E0187 Prep Batch: 13E0187_P

Lab Sample ID: 13E0187-BS1

Matrix: Water

Analysis Batch: 13E0187

Spike
LCS LCS

Analyte

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 13E0187_P
%Rec.
Added Result Qualifier Unit D %Rec Limits

4.69

4.74

mg/l

mg/l

93.8

94.8

90 - 110

80 - 120

5.00

5.00

Lab Sample ID: 13E0187-MS1 Client Sample ID: RW-3097 **Matrix: Water Prep Type: Total** Analysis Batch: 13E0187 Prep Batch: 13E0187_P Sample Sample Spike Matrix Spike Matrix Spike %Rec. Result Qualifier Added Result Qualifier Unit D %Rec Limits

Lab Sample ID: 13E0187-MSD1

Matrix: Water
Analysis Batch: 13E0187

Sample Sample Spike itrix Spike Dup Matrix Spike Dup Matr

Result Qualifier Added Result Qualifier Limits Limit Analyte %Rec ND 5.00 4.70 Nitrate-Nitrogen mg/l 93.9 80 _ 120 0.932 12 1

Lab Sample ID: 13E0187-DUP1

Matrix: Water

Analysis Batch: 13E0187

Sample Sample Duplicate Duplicate Duplicate Duplicate RPD

AnalyteResult
Nitrate-NitrogenQualifierResult
30.6QualifierUnit
mg/lDRPDLimitNitrate-Nitrogen30.630.2mg/l1.3213.1

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6/4/2013

Project/Site: [none]

Lab Sample ID: SWE0207-01

Matrix: Water

Client Sample ID: RW-3097
Date Collected: 05/30/13 13:50
Date Received: 05/31/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0187_P	05/31/13 09:30	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0187	05/31/13 10:06	CBW	TAL SPK

Lab Sample ID: SWE0207-02

344E0207-02

Matrix: Water

Client Sample ID: RW-1091					
Date Collected: 05/30/13 15:38					
Date Received: 05/31/13 08:00					

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0187_P	05/31/13 09:30	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0187	05/31/13 10:24	CBW	TAL SPK

Client Sample ID: RW-1097 Lab Sample ID: SWE0207-03

Matrix: Water

Date Collected: 05/30/13 13:55 Date Received: 05/31/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0187_P	05/31/13 09:30	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0187	05/31/13 10:43	CBW	TAL SPK

Client Sample ID: RW-1110

Lab Sample ID: SWE0207-04

Matrix: Water

Date Collected: 05/30/13 14:30 Date Received: 05/31/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0187_P	05/31/13 09:30	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0187	05/31/13 11:02	CBW	TAL SPK

Client Sample ID: RW-1171 Lab Sample ID: SWE0207-05

Date Collected: 05/30/13 15:00 Matrix: Water

Date Received: 05/31/13 08:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total	Prep	Wet Chem		1.00	13E0187_P	05/31/13 09:30	CBW	TAL SPK
Total	Analysis	EPA 300.0		1.00	13E0187	05/31/13 11:20	CBW	TAL SPK

Laboratory References:

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

Certification Summary

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0207

Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-071	10-31-13
Washington	State Program	10	C569	01-06-14

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Method Summary

Client: ARCADIS U.S., Inc. - Liberty Lake

Project/Site: [none]

TestAmerica Job ID: SWE0207

Method	Method Description	Protocol	Laboratory
EPA 300.0	Anions by EPA Method 300.0		TAL SPK

Protocol References:

Laboratory References:

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

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TAL-1000 (0612)

TEMP:

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RECEIVED BY: PRINT NAME

TIME

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TestAmerica

FAX 922-5047 FAX 924-9290 FAX 906-9210 FAX 563-9210 253-922-2310 F 509-924-9200 I 503-906-9200 I 907-563-9200 I 11922 E. First Ave., Spokane WA 99206-5302 9405 SW Nimbus Ave., Beaverton, OR 97008-7145 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 5755 8th Street East, Tacoma, WA 98424-1317

TA WOID 050 * Turnaround Requests less than standard may incur Rush Charges DATE: 5-3/-72 [V 3 2 1 <1 TURNAROUND REQUEST TIME: Fetroleum Hydrocarbon Analyses LOCATION/ COMMENTS Work Order #: SWEO20 Organic & Inorganic Analyses in Business Days * Specify: #OF CONT. OTHER MATRIX (W, S, O) CHAIN OF CUSTODY REPORT RECEIVED BY: PRINT NAME: REQUESTED ANALYSES PRESERVATIVE Aredis US. P.O. NUMBER: TIME: DATE: REPORT TO: Tom Mulland Aidge Dr. ADDRESS: 695 Capacy Aidge Dr. Acolbre accachs - US. Com THE LEADER IN ENVIRONMENTAL TESTING 1430 500 538 355 SAMPLED BY,), De boy C. Schoof PROJECT NAME Johina Calley Daines SAMPLING DATE/TIME 533-13 CLIENT SAMPLE IDENTIFICATION CLENT: YY PROJECT NUMBER RELEASED BY: PRINT NAME:

Page 14 of 15

ADDITIONAL REMARKS:

RELEASED BY:

PRINT NAME

TestAmerica Spokane Sample Receipt Form

Work Order #: SWEDED Client: Avcad	(Project: YVD
Date/Time Received: 0800 5-3/-()	Bv:	Cw		Project: 1 V
Samples Delivered By: Shipping Service Courier Clien	itOthe	r:	:	
List Air Bill Number(s) or Attach a photocopy of the Air Bill:		T		
Receipt Phase	Yes	No	NA	Comments
Were samples received in a cooler:	8			
Custody Seals are present and intact:			8	
Are CoC documents present:	ষ			
Necessary signatures:	1			
Thermal Preservation Type: Blue Ice Gel Ice Real Ice	Dry Ice	□None	Other:	
Temperature: 3.0 °C Thermometer (Circle one Serial #18	2208348k	eyring IR	Serial # 11	1874910 IR Gun 2)(acceptance criteria
Temperature cut of range: ☐Not enough ice ☐lice melted ☐	w/in 4hrs o	f collection	□NA □	Other:
Log-in Phase Date/Time: 19113 (33) By: (15)	Yes	No	NA	Comments
Are sample labels affixed and completed for each container	2			
Samples containers were received intact:	حز			
Do sample IDs match the CoC	حے			
Appropriate sample containers were received for tests requested				
Are sample volumes adequate for tests requested	<u> </u>		T-117.15	
Appropriate preservatives were used for the tests requested	<u>></u>			
pH of inorganic samples checked and is within method specification	2			
Are VOC samples free of bubbles >6mm (1/4" diameter)	50			4194464
Are dissolved parameters field filtered			2	~~***
Do any samples need to be filtered or preserved by the lab				
Does this project require quick turnaround analysis		χ		
Are there any short hold time tests (see chart below)	X			Nitrate
Are any samples within 2 days of or past expiration		20	4	
Was the CoC scanned	7			
Were there Non-conformance issues at login		>	. =	
If yes, was a CAR generated #			5	

24 hours or less	48 hours	7 days
Coliform Bacteria	BOD, Color, MBAS	TDS, TSS, VDS, FDS
Chromium +6	Nitrate/Nitrite	Sulfide
	Orthophosphate	Aqueous Organic Prep

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